

MALIGNANCY AN ADAPTIVE MUTANT

I have long agreed with Otto Warburg's hypothesis that malignancy and the premalignant state is characterized by a substitution, in the way in which the cell obtains energy for function from glucose, from the aerobic oxidation of this compound to its anaerobic fermentation. I suggest, however, that this alteration is associated with a marked decline in the ionic calcium concentration of the cell and an equally marked increase in its ionic hydrogen concentration.

These changes within the malignant cell represent the duplication around and within it of the environment and internal climate of the primordial living cell. The cell was characterized by anoxia, acalialia and hyperacidity. Neither oxygen or vitamin D had yet been synthesized and the excess of free sulphur produced high acidity.

Just as the energy release process of the primordial cell knew no control so the cell with this internal climate, lacking the ionic calcium control factor of the more modern cell, this release proceeds unimpeded. The net result of such influences is that ultimately a mutant cell will be evolved that will take better advantage of this offering of nil control and an unexhaustible supply of energy.

The mechanism by which these changes enforce malignant mutation may be described as follows. Firstly the anoxic, acalic and hyperacidic state exerts "pressure" on the genetic code to mutate in a direction that would have biochemical mechanisms of the cell provided, not with normal vibratory enzymatic stimulus but with such stimulus that is "tailor made" for these biochemical mechanisms that have already adapted to the altered environment of deficiency. Once this final step of cellular adaptation to deficiency occurs then the non controlled biochemical mechanisms can truly "take off". The malignant mutant, like the primordial cell can function continuously and excessively utilizing the uncontrolled fermentation process but unlike the primordial cell it can feast on a glut of energy provided in food and the complex solar energy bonded molecules that constitute body structure

The pre-malignant state of relative degrees of anoxia, acalnia and hyperacidity, however, is also the disease prone state to other ionic calcium deficiency diseases, the "mal-adaptive diseases". Like these diseases that may be precipitated by a psychic or physical stressful state, that puts great demand on ionic calcium reserves and so aggravates chronic deficiency and the direct and indirect effects of this deficiency, stress of this nature may also precipitate the occurrence of cancer. As in the instances of the mal-adaptive diseases, however, this occurrence of cancer following stress will only happen in those few cases that were literally "sitting on the fence" between the state of non deficiency and of deficiency that is adequate to excite not only adaption but also mal-adaption and mal-adaptive disease.

CONCLUSION

This "unified concept of disease" provides reason for the frequent association of these direct and indirect calcium deficiency disease with each other and with the stigma, functional or physical, of the deficiency syndrome. Reason is given, for example, for the lifetime history of constipation and/or leg cramps with arthritis, diabetes and /or hypertension in later life and for countless other permutations and combinations of these diseases and this deficiency syndrome